# Snap and Clone

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INFRASTRUCTURE PARTNERSHIP

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# Snap and Clone

- What is it?
- What are its uses?
- What are implementation considerations?

# Clone

- Clone is a point-in- time full copy of a source volume (i.e. LUN); once created, the clone-based snapshot is independent of the source volume and can be used even if the source volume is lost, corrupted
- Creation of clone of critical data has a wide variety of purposes, including backup/recovery, application testing, data movement, and multiple database copy elimination/consolidation
- Clone provides the ability to make copies rapidly; they happen at the SAN level, and do not require server resources reducing the impact on production
- Clone offering requires the same LUN size for the target as the original; can be ordered via a standard (short form) work request

# Snap

- Snap, or pointer-based snapshot, is a virtual copy of source data created by pointers that redirect read operations either to the original data or copies of portions of the original data that have changed; dependent on the preservation of source volume integrity
- Snap point-in-time copies of critical data have wide variety of purposes; can include short-term backup, application testing, data movement, and multiple database copy elimination/consolidation
- Snap
  - Consumes I/O from production as multiples reads occur
  - Can consume as much space as the original
  - Does not provide operational recovery from loss of the source volume

# Implementation Considerations

- Application data must be stored on the tier 1 or tier 2 enterprise storage area network at the Commonwealth Enterprise Solutions Center (CESC) in Chester
- Implementation requires installation of a replication manager agent and may require firewall rule changes
- Clone can occur from tier 1>tier 2, tier 1>tier 1 or tier 2>tier 2
- Snaps are on the same tier only
- Snap and clone provided for the RU cost of just the storage
- Snap requires custom work request as sizing of the target storage needs to be right-sized based on the customer requirements

# Questions